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EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 11158733
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APPLICATION NUMBER : 09324797

$$\mu\ (W) \leqq 0.\ 2 \qquad \text{I}$$

APPLICANT : TOYOBO CO LTD;

INVENTOR : ISODA HIDEO;

INT.CL. : D01F 8/14 D01D 5/34 D02J 1/22
D04H 1/42 // D04H 1/04

TITLE : POLYESTER STAPLE FOR WET TYPE NONWOVEN FABRIC HAVING LATENT CRIMPING DEVELOPMENT AND ITS PRODUCTION

$$\mu\ (W) / \mu\ (D) \leqq 0.\ 7 \qquad \text{II}$$

ABSTRACT : PROBLEM TO BE SOLVED: To obtain the subject staple for providing elastic nonwoven fabric having latent crimping development, light weight and excellent elongation recovery, by spinning a specific polyester A and a prescribed polyester B under specified conditions.

SOLUTION: This staple comprises a side by side type or an eccentric core- sheath type fiber comprising a polyester A composed of a polypropylene terephthalate as a main component and a polyester B composed of a polyethylene terephthalate as a main component and is obtained by melting the components so as to make the ratio of the polyester A to the polyester B of 30/70 to 70/30 by weight at a temperature 10-30°C higher than the melting point of each component, subjecting the polymers to the melt conjugate spinning in a side by side type or eccentric sheath core type, heat-treating the yarn in tension at 100-190°C treatment temperature in a drawing process, providing the yarn with an finishing oil, cutting the yarn into 2-100 mm length to give the a polyester staple for wet type nonwoven fabric satisfying equations 1 and II [μ (W) is a friction coefficient between fibers in wetness; μ (D) a friction coefficient between fibers in dryness].